- An "empty" TPFDD can be created, into which existing requirements may be copied; or new requirements created from scratch. This method is particularly useful for creating a TPFDD by copying FMs from a "dummy TPFDD" that contains a list of generic FMs.

- An existing TPFDD may be copied entirely into a new TPFDD, and then the requirements may be edited. This allows a series of different TPFDDs to be created from a basic source or pattern.

- An existing TPFDD may be selected as target, to which requirements from the "current" TPFDD may be copied. This function supports major modifications of existing TPFDDs, when movement requirements are being copied from other TPFDDs rather than being created internally.

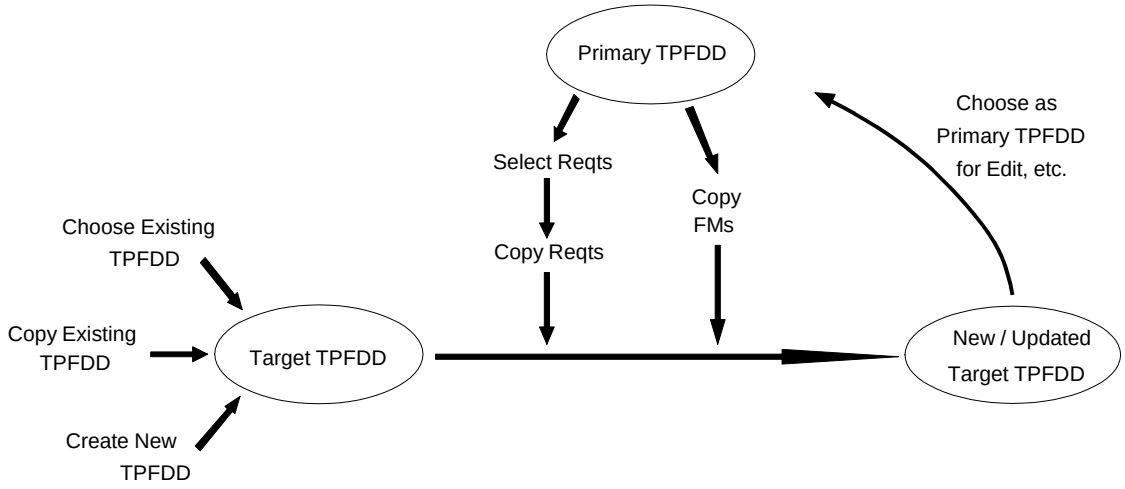


Figure 4-18: Target TPFDD Mode

The movement requirements of the new target TPFDD cannot be viewed or edited while in a target TPFDD state; the target TPFDD must be closed, and then selected as the primary TPFDD, in order to edit the movement requirements, or to delete the TPFDD itself.

This function is accessed through the **Target TPFDD Arrow Box**, in the center of the top of the TPFDD Editor screen.

A new TPFDD may be created either under an existing OPLAN ID, or else under a new OPLAN ID which is created at the same time. The main effect of this option is that it controls where the new TPFDD will be aligned, for later TPFDD selection purposes.

A new TPFDD may be created before one is selected as primary TPFDD.

To create a new TPFDD:

1. Click the left mouse button in the **Arrow Box**. After clicking on the arrow, an OPLAN ID menu list appears allowing the user either to select from existing OPLANs or to create a new one.

2. If "New OPLAN" is selected, the user is prompted for an OPLAN ID. This entry should follow standard formatting (five characters).

3. After an OPLAN is created or selected, a prompt appears allowing the user either to select and copy from an existing TPFDD associated with that OPLAN (if applicable), or to create a whole new TPFDD. A complete TPFDD may only be copied to another TPFDD within the same OPLAN.

4. When creating a new TPFDD, a prompt appears for a new suffix for the TPFDD. The suffix will be added to the end of the OPLAN identifier and Site Identifier (Site ID) to give the new TPFDD a name.

   (The DART default is to create a new TPFDD Name by adding the phrase **-TRANS-** to the OPLAN ID, and then adding the user-specified suffix to that. The "TRANS" Site ID may be changed using the **Change Site ID** command; this should only be done by the site System Administrator.)

5. When both a new OPLAN and new TPFDD are being created, after the suffix is entered, a TPFDD Details menu appears, with all entries blank; these may be filled in now or later.

   If an existing OPLAN is being used for the new TPFDD, a pop-up menu containing the following two options will appear:

   - *Copy OPLAN information from existing TPFDD*

   - *Specify new TPFDD information*.

   (The OPLAN/TPFDD information referred to here means the TPFDD Details selectable in the TPFDD Operations Pop-Up Menu, described elsewhere. Those details can either be copied from an existing TPFDD (under the same OPLAN) or new information can be entered manually.)

   If **Copy OPLAN Information** is selected, a pop-up menu appears with the copied text details; if **Specify New** is selected, the pop-up menu appears with all blank fields; in either case, these fields may be edited as desired now, or later.

6. When that step is complete, confirmation is requested regarding the creation of the new TPFDD. (At this point, the user may still cancel everything.)

If accepted, the new TPFDD is created, and the basic TPFDD details appear in a new **Target TPFDD Information Window**, under the Arrow.

Also, two additional options will be available on other menus. They are the **Copy to Target** under Marked Record Operations and **Copy FM to Target** under FM Operations. These options are explained in their respective sections.

COPY AN EXISTING TPFDD

To select an existing TPFDD as a target for copy operations:

1. Select a primary (source) TPFDD as usual.

2. Click the left mouse button in the **Arrow Box**. After clicking on the arrow, an OPLAN ID menu list appears allowing the user to either select from existing OPLANs or create a new one.

3. Select the desired target OPLAN.

   CAUTION: The description text shown for each OPLAN is actually the TPFDD description from the first TPFDD listed under each OPLAN in the DART database.

4. The OPLAN menu is followed by another menu listing all TPFDDs under the selected OPLAN. Select the desired target TPFDD.

5. Once a TPFDD is selected, the TPFDD details appear in the **Target TPFDD Information Window**; and two additional options will be available on other menus.

   They are the **Copy to Target** under Marked Record Operations and **Copy FM to Target** under FM Operations. These options are explained in their respective sections.

TARGET TPFDD INFORMATION WINDOW

Once a target TPFDD is designated, a TPFDD Information and control pop-up menu can be activated by clicking on the TPFDD Assignment Line (**TPFDD:**) in the **Target TPFDD Information Window**. This pop-up menu functions much like the similar menu for the primary selected TPFDD.

A TPFDD cannot be deleted from the Target TPFDD state. It must be deselected there, and then be selected as primary TPFDD, before it can be deleted.

4.5 ASSIGNING ULNs, CINs, PINs IN DART

DART allows the user to specify the ReqID (Prefix + ULN) when a new force is created. The system also allows you to change the ReqID for requirements transferred from one TPFDD to another in DART.

4.5.1 Changing The ReqID For A Single Requirement

The first step for changing the ReqID is to plan. Think about the records you want to change and determine if there is a common characteristic(s) that can be used to create a collection using the "Select" Screen.

1. Click on the desired ULN to obtain the following pop-up menu:

Choose an Operation on U-0AAH	
Mark	Mark U-0AAH (Same as clicking right button)
Add Note	Add a test note to U-XXXX
Add ILOC	Add an Intermediate Location to U-0AAH
Characteristics	Display Attributes to U-0AAH
Details	Use new details menu
Renumber	**Renumber U-0AAHC**
Delete	Delete U-0AAH from the TPFDD
Remove	Remove U-0AAH from the current collection
Scroll	Scroll U-0AAHC to the top of the window
FM Info	Show a list of Force Modules for U-0AAH
Changes	Show a list of changes made to U-0AAH
Fragment Record	Fragment reqid U-0AAHC into N reqids
Split Shipment	Split U-0AAH
Cargo Categories Editor	Edit/View U-0AAH

2. Click on "Renumber." DART will provide the following pop-up:

Choose Renumbering Style

By Basic FRN	Renumber the basic FRN of each ULN, preserving other characters
Compress Subordinates	Renumber the basic FRN of each ULN, starting with U-XXXA, U-XXXB within groups
Sequential 4-Char ULNs	Use 4-character ULNs only, counting sequentially from a starting point
User Input	For each old REQID, ask for a new REQID

3. Select the desired ULN numbering style.

4. DART will prompt you in a pop-up for the desired ULN.

DART will check the TPFDD to ensure that the requested ReqID does not duplicate an existing record and that the letters I and O are not used. Once these conditions are met, DART will confirm the change with a pop-up message indicating both the old and new ReqIDs.

4.5.2 Changing The ReqID For Multiple Records

Working with multiple records is very similar to the single record change just described. The primary difference is in specifying the new ULN range and sequencing option. There are two methods available to change multiple ReqIDs. The first is by "Marking" the desired records and then operating on the "Marked Records." The second option is to change the ReqIDs on the requirements that comprise a FM. This option is available through the "FM" button on the menu bar. In both options, the process starts with planning. Know what you want to do before you sit down at the terminal and plan the most logical way to accomplish the desired tasks. Then you should identify the common characteristic(s) for the records to be changed and the sort options that will group appropriate records in the collection for easy editing.

CHANGE PROCEDURES WHEN WORKING WITH MARKED RECORDS:

1. "Mark" the records to be changed.

2. Click on the "Marked Records" button on the menu bar and select the "Renumber…" option.

A pop-up menu asks the user to choose one of the options described below:

Option	Resulting action on the TPFDD
By Basic FRN	DART will renumber the basic 3 digit FRN of each ULN. The existing fourth and fifth characters will be retained.

Compress Subordinates	DART will renumber the basic 3 digit FRN of each ULN. Fourth and fifth characters will be renumbered sequentially (starting with XXXA, XXXB, …) within each basic FRN group.
Sequential 4 character ULNs	DART will renumber the "Marked Records" sequentially using 4 character ULNs. Existing 5 character ULNs will be renumbered in place as the next sequential 4 digit ULN.
User Input	DART will prompt you for a new ReqID for each record as it is changed.

3. Select the desired renumbering option.

DART will prompt you for a starting sequence number. If CINs and/or PINs are included in the marked records, DART will prompt you for the starting sequence number (numbers only) for the CINs and PINs. The first two digits of the CINs and PINs identify the receiving service and cannot be changed through DART. Type the desired sequence number and press **< RETURN >** .

If you selected any option except "User Input," DART will then prompt you for a starting three or four digit (based on the renumbering option selected) FRN. Type the desired starting FRN and press **< RETURN >** .

DART will renumber the selected ReqIDs. The operation could take several minutes depending on the number of ReqIDs changed (one test took about nine minutes for about 1300 records).

Once the selected records are renumbered, DART will display a pop-up menu asking if you want to include the renumbered records in an existing force module, create a new FM containing these records or, take no action.

4. Select a FM option.

CHANGING REQIDS IN FMS

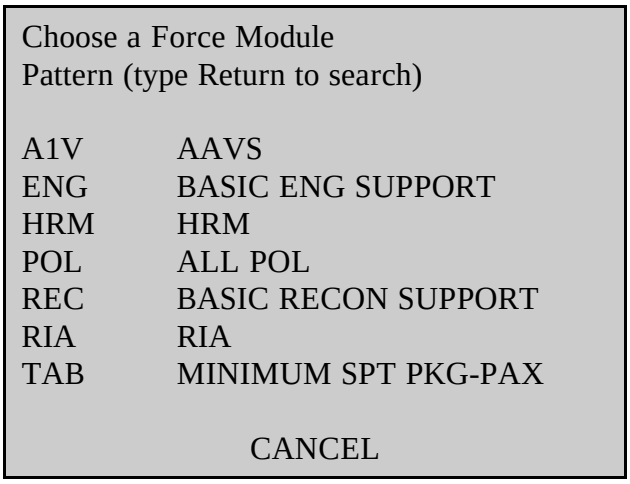
This process is similar to the marked records process described above.

1. Click on the "FM" button on the main menu bar to obtain the following pop-up menu:

Force Module Operations	
Add to FM…	Add some records to an existing force module
Remove from FM…	Remove some records from an existing force module
Define FM…	Define a new force module containing some records
Replace FM contents…	Replace the requirements in a force module with some records
Edit FM Text…	Edit the title or description of a force module
Dissolve FM..	Dissolve a force module, removing it from the database
Copy Records in FM…	Copy the requirements in a force module, optionally creating new module
Copy FM Membership…	Create a new force module with the same definition as an existing module
Rename FM…	Rename a force module
Renumber FM…	**Renumber the requirements in a force module, optionally creating new module**
Mark FM…	Mark all requirements in the current collection that are in a specified module
F11 Report	Produce an F11 report from a Force Module
Reread FMs	Reread the list of active Force Modules from the Database

2. Click on the "Renumber…" option.

DART will display a pop-up menu containing a list of all the FMs currently in the TPFDD.



3. Click on the desired FM.

DART will then display a pop-up menu containing the numbering sequence options discussed previously.

4. Click on the desired numbering sequence option.

5. Type the desired starting number and press **< RETURN >** (if the FM contains CINs or PINs, DART will prompt for the CIN/PIN starting sequence number first).

DART will check to ensure that the renumbered records will not duplicate existing records in the TPFDD and, that the new FRN does not contain the letters I and O. If these conditions are satisfied, DART will renumber the records. DART will also display a pop-up list of the renumbered records showing both the old and new numbers and ask you to acknowledge.

6. Click on the "OK" button to acknowledge the change.

Similar to marked records renumbering, DART will ask if you want to add the changed records to an existing force module or, to create a new force module with the changed records. If either option is desired, select the corresponding button or click the middle mouse button while the cursor is placed on a blank portion of the screen (or press **< RETURN >**) to close the pop-up and return to the "Edit" mode.

4.6 AUTOMATED SPLIT SHIPMENT

This option is only available for ULNs after the POE and POD are designated and the Mode and Source of transportation have been specified. You can "Split" a ULN moving via either air or sea. DART automatically assumes that passengers will move by air (the "P" record) and cargo

will move by sea (the "C" record) for split shipments. Once the ULN has been split, you can move both passengers and cargo between the shipments by using the cargo editor.

4.6.1 To Split Ship a Single ULN

1. Click on the ReqID of the ULN to be split to obtain the following pop-up:

Choose an Operation on U-0AAH	
Mark	Mark U-0AAH (Same as clicking right button)
Add Note	Add a test note to U-0AAH
Add ILOC	Add an Intermediate Location to U-0AAH
Characteristics	Display Attributes to U-0AAH
Details	Use new details menu
Renumber	Renumber U-0AAHC
Delete	Delete U-0AAH from the TPFDD
Remove	Remove U-0AAH from the current collection
Scroll	Scroll U-0AAHC to the top of the window
FM Info	Show a list of Force Modules for U-0AAH
Changes	Show a list of changes made to U-0AAH
Fragment Record	Fragment reqid U-0AAHC into N reqids
Split Shipment	**Split U-0AAH**
Cargo Categories Editor	Edit/View U-0AAH

2. Click on the "Split Shipment" option.

DART will ask you to "Confirm" the operation.

3. Click on the "OK" button.

DART will check to ensure that the selected ULN has both passengers and cargo and that the current record contains valid POE, POD, mode, and source information. If these conditions are not met, DART will pop-up a warning message stating the detected error and abort the operation

without creating the split record. If these conditions are met, DART will then prompt you for a new POD (sea or air as appropriate):

```
Select Air POD for personnel shipments originally
in Tunis Pattern (type Return for Search)

JEAH    [IAP]    JERBAZARZIS

FTZH    [MAP]   EL BORMA

HNTH    [MAP]   GABES

type one Search GEOLOC Table Name  Cancel
```

The pop-up asks you to designate the new POD and provides a scroll listing of the GEOLOCs currently active in the TPFDD. Either scroll to the desired POD and click on the name or, type the GEOLOC code at the flashing cursor. A search GEOLOC table help option is also available for assistance.

4. Click on or type in the desired POD GEOLOC code.

DART will follow with a select POE pop-up:

```
Select Air POE for personnel shipments originally
in Virginia Pattern (type Return for Search)

AEDY   [IAP]    ALCONBURY, UK
AGGN   [MAP]   ALTUS AFB, OKLA
AJXF    [MAP]   ANDREWS AFB/NAF, MLD

type one Search GEOLOC Table  Name Cancel
```

The operation is the same as described between step 3 and 4 above.

5. Click on or type in the desired POD GEOLOC code.

DART will create the split record and then prompt you for movement phasing information in relation to the ULN RDD:

Rephase Personnel Air Shipments from Original RDD Date to Set: ALD EAD LAD Offset (%) OK Cancel

Adjustments are based on an offset from the original RDD and are expressed as either (+) them number of days later than the RDD or (-) the number of days earlier than the original RDD.

6. Click in the ALD/EAD/LAD box and place a numerical offset preceded by a + or - as appropriate and click "OK" or click "OK" with no entries and edit later from the TPEDIT screen.

You can click on the "Cancel" button to terminate rephasing at any time. Both parts of the "Split" records will retain the originally scheduled C-Days.

4.6.2 Multiple Record "Split Shipment"

Multiple record split shipments is accomplished through "Marked Records".

1. "Mark" the records for split shipments.

2. Click on a marked record to obtain the following pop-up:

Operation on the Marked ULN/CIN/PIN List	
Unmark All	Clear the list of marked entries
Mark All	Mark the entire collection
Toggle All	Mark all unmarked, and unmake all marked
List	Pop up a list of all marked entries
Delete	Delete all marked entries from the TPFDD
Remove	Remove all marked entries from the current collection
Copy	Copy all marked entries
Renumber	Renumber all marked entries
Split Shipments	**Split marked records into cargo and personnel shipments**
Unsplit Shipments	Unsplit marked records into single shipment from cargo and personnel shipments

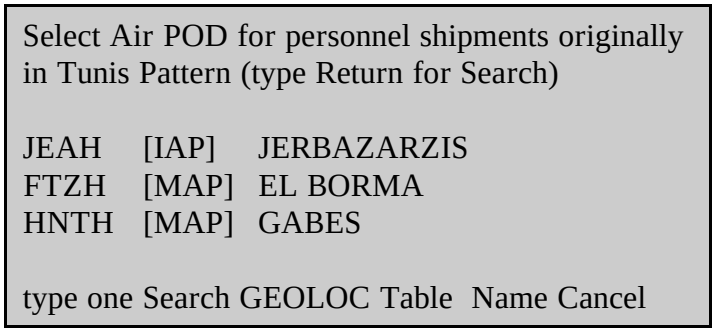
F11 Report	Prepare marked entries to be used in F11 reports

3. Click on the "Split Shipments" option.

DART will ask you to confirm the "Split Shipment" operation and list the total number of records to be split when the records are listed sequentially in the collection or the actual ReqIDs for non-sequential records.

4. Click on "OK."

DART will check to ensure that the selected records contain both personnel and cargo requirements and that the POD, POE and transportation mode(s) and source(s) are designated. If these conditions are not met, DART will inform you that the operation cannot be performed and provide the reason for termination. If the conditions are met, DART will prompt you for POD information for the new portion of the record. There are separate POD prompts for each country/state code in the original list of PODs. **Ensure you read the text and know which PODs are being replaced.** The following pop-up will appear:



The pop-up asks you to designate the new POD and provides a scroll listing of the GEOLOCs currently active in the TPFDD. Either scroll to the desired POD and click on the name or, type the GEOLOC code at the flashing cursor. A search GEOLOC table help option is also available for assistance.

5. Click on or type in the desired POD GEOLOC code.

6. Repeat for the POE selection(s).

DART will create the split record and then prompt you for movement phasing information in relation to the ULN RDD:

Rephase Personnel Air Shipments from Original RDD Date to Set: ALD EAD LAD Offset (%) OK Cancel

Adjustments are based on an offset from the original RDD and are expressed as either (+) them number of days later than the RDD or (-) the number of days earlier than the original RDD.

7. Click in the ALD/EAD/LAD box and place a numerical offset preceded by a + or - as appropriate and click "OK" or click "OK" with no entries and edit later from the TPEDIT screen.

You can click on the "Cancel" button to terminate rephasing at any time. Both parts of the "Split" records will retain the originally scheduled C-Days.

4.7 FRAGMENT A REQUIREMENT

DART provides an automated method to fragment a single ULN into multiple subordinate records (-A0, -B0, -C0, etc.). "Insert" records (-A1, -A2, -A3, etc.) must be created manually.

1. Click on the ULN to be fragmented to obtain the following pop-up:

Choose an Operation on U-0AAH	
Mark	Mark U-0AAH (Same as clicking right button)
Add Note	Add a test note to U-0AAH
Add ILOC	Add an Intermediate Location to U-0AAH
Characteristics	Display Attributes to U-0AAHC
Details	Use new details menu
Renumber	Renumber U-0AAHC
Delete	Delete U-0AAH from the TPFDD
Remove	Remove U-0AAH from the current collection
Scroll	Scroll U-0AAHC to the top of the window
FM Info	Show a list of Force Modules for U-0AAH

Changes	Show a list of changes made to U-0AAH
Fragment Record	**Fragment reqid U-0AAHC into N reqids**
Split Shipment	Split U-0AAH
Cargo Categories Editor	Edit/View U-0AAH

2. Click on "Fragment Record" to obtain the following pop-up:

Number of desired fragments from U-XXXX (an integer)

3. Enter the total number of fragments desired and press **< RETURN >** .

DART will display several dialog boxes advising you of "Database Transactions" in-progress. When DART has completed the database operations it will return to the TPEDIT screen and display the newly created fragments. Fragments retain the base ULN and have sequentially numbered suffixes beginning with "A0".

All cargo and personnel for the requirement are retained in the A0 record. Distribution of cargo/PAX and other ULN data between "frags" can be accomplished from the cargo editor and/or TPEDIT screen function as necessary.

4.8. UPDATING TPFDD FROM TUCHA

Dart provides the ability to update a TPFDD from TUCHA from the TPFDD Editor (TPEDIT) screen. You must select a TPFDD before the "UPDATE" function is available. Additionally, the update process overrides the "Rollback" capability available through the DART "Update" screen. The TUCHA update can be rolled back but the transaction record for the original TPFDD is lost when the TUCHA update operation is invoked. For this reason, and others surrounding the TUCHA update process, **it is strongly advised to make a copy of the TPFDD before performing this operation.** As a minimum, commit or undo the current transaction file through the "UPDATE" screen.

1. Select a TPFDD by clicking on "TPFDD" in the TPFDD Information Box at the top left of the screen. If a TPFDD has already been selected skip to step 2.

2. Click on "TPFDD" in the TPFDD Information Box at the top left of the screen to obtain the following pop-up menu:

TPFDD Operations	
Select	Select a new TPFDD
Details	Show details of TPFDD XXXX
Clear	Close the current TPFDD
Copy	Create a new TPFDD by copying XXXX
Update	Update XXXX from the TUCHA
Delete	Delete TPFDD XXXX
Close DB	Disconnect from ORACLE database
Exit	Exit the TPFDD Editor

3. Click on "Update."

DART will display a pop-up dialog box warning you that the transaction records for the TPFDD will be lost if the update operation is continued and ask you to confirm your desire to update the TPFDD.

4. If ready to proceed, click on "OK."

DART will update the TPFDD from the TUCHA resident in DART. A list of invalid UTCs based on the new TUCHA and, where possible, suggested replacements will appear.

4.9 VIEW AND EDIT FORCE MODULE (FM) TITLES AND DESCRIPTIONS

DART provides the capability to view and update Force Module (FM) titles and descriptions.

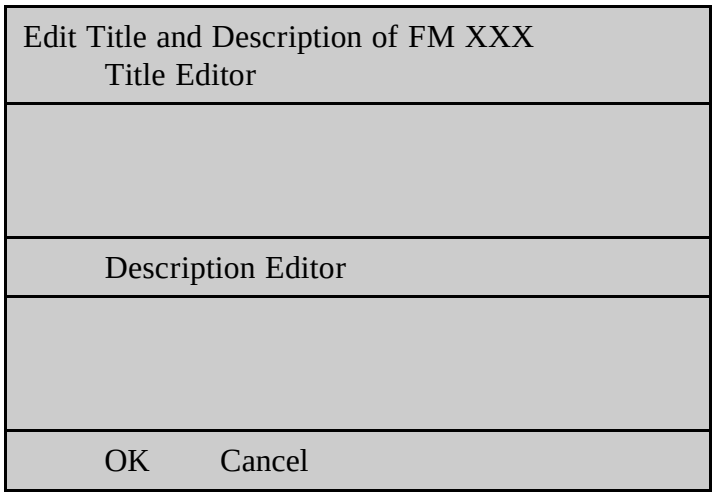
1. Click on the "FM Edits" button on the TPEDIT screen menu bar to obtain the following pop-up menu:

Force Module Operations	
Add to FM…	Add some records to an existing force module
Remove from FM…	Remove some records from an existing force module
Define FM…	Define a new force module containing some records
Replace FM contents…	Replace the requirements in a force module with some records

Edit FM Text…	**Edit the title or description of a force module**
Dissolve FM..	Dissolve a force module, removing it from the database
Copy Records in FM…	Copy the requirements in a force module, optionally creating new module
Copy FM Membership…	Create a new force module with the same definition as an existing module
Rename FM…	Rename a force module
Renumber FM…	Renumber the requirements in a force module, optionally creating new module
Mark FM…	Mark all requirements in the current collection that are in a specified module
F11 Report	Produce an F11 report from a Force Module

2. Click on the "FM Title or Description" option.

DART will display the FM Title and Description Editor pop-up shown below.



3. Move the cursor to the desired point for editing and click.

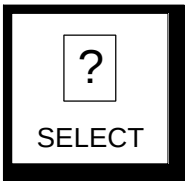
4. Type the desired changes.

The FM Editor is set in the insert mode. All text will be inserted at the insertion point. Existing text to the right of the insertion point will be moved to make room for new text. Depending on the workstation keyboard layout, the "Delete" key should delete the character to the left of the cursor while the "Control + D" keys should delete the character at the cursor.

5. When finished with editing, click on "OK".

If you decide to abort the editing operation, click on "Cancel" and no changes will be made.

4.10 AD-HOC RETRIEVALS



Users must retrieve (select) TPFDD movement requirements before viewing or editing them on the Chart Display screen.

The retrieval function is activated by clicking on the TPFDD Editor **Select Icon**. This will display the Retrieval screen. This screen is used to specify and build retrievals to be performed with the currently selected TPFDD.

The Retrieval screen provides an assortment of filtering, selection, and sorting options that determine which movement requirements are shown in the Chart Display screen. Virtually any factors or attributes (codes) of movement requirements may be used for the retrieval process.

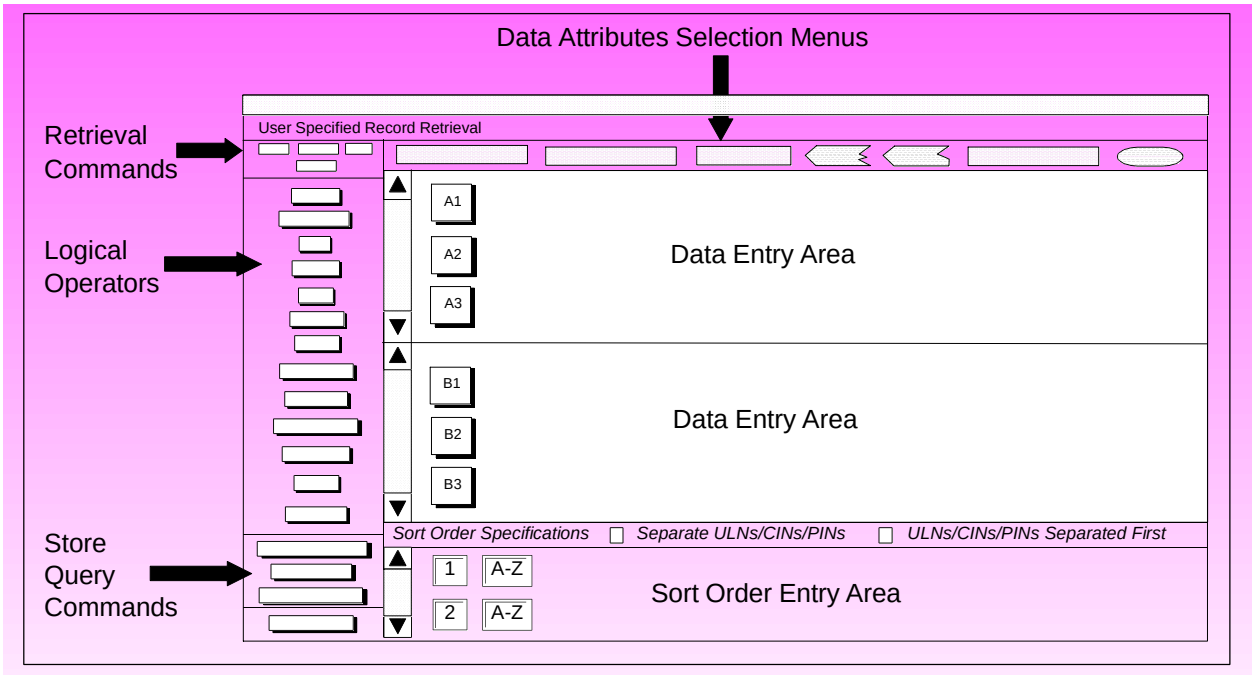


Figure 4-19: Select Retrieval Screen

After a retrieval is performed, DART displays the movement requirements on the Chart Display, where data may be viewed, and global or individual changes can be made to the collection of retrieved requirements.

(A **collection** is a DART-unique term for any set of movement requirements retrieved for display and editing in the TPFDD Editor Chart Display.)

The Retrieval screen is divided into six different sections, whose functions are described below.

4.10.1 Data Entry

The Data Entry Section of the retrieval screen has two or more areas, A, B, and C, that are used to build query statements that define the data retrieval. (The number of areas shown will depend on the monitor and screen sizes. Areas not displayed may be scrolled.)

Each individual data entry area has lines labeled A1 to A5, B1 to B5, or C1 to C5, respectively. Additional numbered lines will appear as the first ones are used. Lines may be scrolled by clicking the left mouse button on the associated scroll bar arrow.

4.10.2 Data Attributes Selection

Along this menu bar are displayed, using appropriate shapes and colors, the button symbols (lozenges) for the plan locations (Origin, POE, ILOC, POD, Destination), as well as buttons for Force Modules (FM) and other planning data attributes. When selected, each button displays a series of pop-up menus.

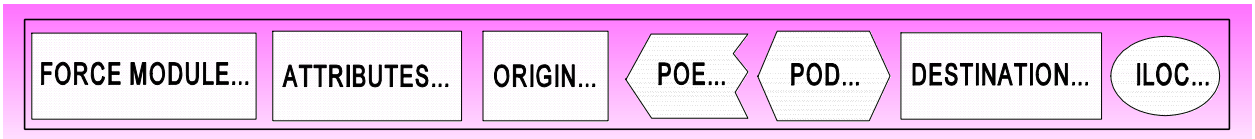
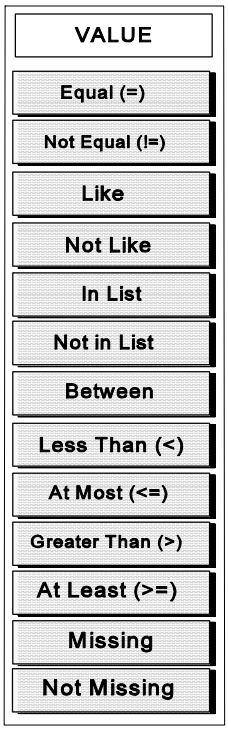


Figure 4-20: Data Attributes Selection Bar

These pop-up menus list all of the possible data attribute codes that may be used for retrievals and sorting. Where a menu option will bring up a sub-menu, the entry has "**...**" following it.

When a lower level menu is being viewed, the upper levels are all displayed above that menu. These permit direct return to any of the upper levels.

4.10.3 Logical Retrieval Operators



To the left of the Data Entry Section is the Operator Section. This section contains the following option buttons:

Value This option allows manual entry of a value in the data specification line. This selection can only be chosen after a data choice and an operator have already been chosen for the current data specification line.

Equal (=) Exactly equal to; when the "Equal (=)" option is selected, the system waits for an input. If a specific value is to be entered, select "Value", otherwise another menu pick could be selected to build a query such as "POE GEOLOC code = POD GEOLOC" code.

Not Equal (! =) Everything EXCEPT an exact match

Like Similar to; REQUIRED for wildcard searches

Not Like Everything EXCEPT a match, when using wildcard entries

In List Everything contained in a list; automatically prompts for input; when through entering items, press **< RETURN >** with no item entered

Not In List Everything NOT contained in a list; automatically prompts for input; when through entering items, press **< RETURN >** with no item entered

Between Inclusive, between starting and ending values

Less Than (<) Less than an end value

At Most (< =) Less than or equal to an end value

Greater Than (>) Greater than a starting value

At Least (> =) Greater than or equal to a starting value

Missing Subject data attribute is empty (null)

Not Missing Subject data attribute is NOT empty (NOT null).

When an operator is selected, that choice will be pasted to the data entry line chosen. If a value has to be entered to complete the line, a small window prompting the user for input will appear. Type in the value and press **< RETURN >** .

CAUTION: Be wary of retrievals on fields that may have **NULL** values. TPFDD data may be incomplete. When in doubt, check for **MISSING** values.

4.10.4 Retrieval Commands

The Command Section is located on the Retrieval screen above the Operator Section. The following three command options are available in this section:

Do It When all data retrieval statements are completed (with the appropriate associations created using areas A, B, and/or C), select the "DO IT" option to perform the retrieval.

If a **Do It** is performed, with no attributes specified, the entire TPFDD will be retrieved.

When records have previously been retrieved in this session, a pop-up menu containing choices regarding the retrieval appears; the choices are:

- *Keep Everything*

  Keep all existing records in the current collection, plus the new records retrieved. The requirement IDs in the original collection will be subdued (grayed) on subsequent TPFDD Chart Displays.

- *Keep Marked*

  Keep marked records in the current collection, plus the new records retrieved. (Option only available when at least one record in the current collection is marked.)

- *New Records Only*

  Do not keep existing records. (The new collection will only contain current retrieval).

When the retrieval is complete, the system will automatically return to the TPFDD Editor Chart Display with the retrieved collection of records displayed.

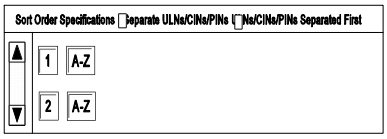
Clear Select Clear to clear all lines in the Data Entry Section. To simply clear one data entry line, click the left mouse button on the line identifier (e.g., A1).

CAUTION: It is strongly recommended that the clear button be used prior to all retrievals, to preclude problems with hidden statement lines.

SQL The SQL option will display the actual Structured Query Language (SQL) code generated to perform the retrieval that has been outlined in the Data Specification Sections. The SQL statements cannot be edited, however they may now be saved as stored queries. (The Display SQL menu button in the Editor Display screen performs this same operation.)

Another command option, located below the Operation Section, is the **Switch Interface** (also called **Tree Query**). (See section on Tree Query, below, for details.)

4.10.5 Sorting Records



Movement requirements may be sorted as they are retrieved into a collection.

A sort option, located in the lower portion of the TPFDD Editor **Retrieval Screen**, instructs the system to display the collection of records in a specific order. Multiple sort criteria may be used. The sort criteria need not be the same criteria used for the basic retrieval.

This sort order will be followed in the TPFDD Editor Chart Display, the Cargo Editor, and in any subsequent printed reports (e.g. F11D and F11E) which are based on the retrieved collection.

Follow these steps to use the sort capability in a retrieval:

1. Select a sort line identifier. The vertical scroll bar allows for entry of sort specifications beyond the two lines displayed on the screen.

2. The A-Z button toggles to provide ascending or descending order options.

3. Select an icon from the horizontal menu bar in the data specification section.

4. Then choose the data field attribute that the records will be sorted on, from the pop-up menu(s). Note that attribute values are not entered for sorting, since these are what are used for the sorting.

5. Add further specifications if desired, by redoing steps 1-4 above.

SORT SEQUENCE OPTIONS

Two special sorting options are provided on the Sort Order Specification Bar to allow sorting with or without regard to the ULNs/CINs/PINs order.

The first option toggles between these orderings:

Separate ULNs/CINs/PINs

The displayed records are grouped by ULNs/CINs/PINs in either a primary (first) sort, or secondary (last) sort capacity. These options are selected from:

- *Separate first ULNs/CINs/PINs*

  The displayed records are first divided by ULNs/CINs/PINs, then sorted by the data field attribute(s) selected.

- *Separate last ULNs/CINs/PINs*

  The displayed records are first sorted by the data field attribute(s) selected, then divided by ULNs/CINs/PINs.

Mixed ULNs/CINs/PINs

The displayed records are first sorted by the data field attribute(s) selected, then sorted alphabetically by ReqID without regard for type of ULN/CIN/PIN.

SORT ORDER

The A-Z sort order produces this sort sequence:

1. Spaces (blanks)

2. Numbers 0-9

3. Letters A-Z.

This means that any field with leading blanks will display at the head of the list. (And, while not proper, and not easily noticed, some TPFDD text fields may have leading blanks.)

COMMON PROBLEMS WITH SORTING

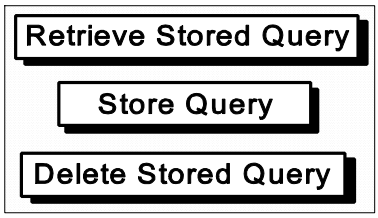
If a sorted collection appears to be out-of-order, verify the exact data in the sort field. For example, if the collection is sorted on a text field, and that field begins with a space in some records, those records will appear before any other records.

Be wary of sorting on TPFDD data that may be incomplete or unusual. Even standard coded fields may have spurious data.

CAUTION: Newly created records will not be placed into sort sequence; these records will be placed at the end of the current collection.

Note: Cargo values may not appear as expected. There are differences between the sources for cargo values for CINs, and for both standard and non-standard ULNs. None of these three sets are comparable.

4.10.6 Store Queries



DART retrievals can be stored and later retrieved for reuse. Queries may be stored as system-wide or as TPFDD specific.

- *System-wide* queries will be accessible at any time.
- *TPFDD-specific* queries will only be accessible when the associated (current) TPFDD is selected.

The Store Query function is available only after a retrieval has been performed that was based on entries made in the Data Entry Section of the retrieval screen. (**Routine Retrievals** in the Edit Display screen, and **Do It** retrievals of the entire TPFDD, do not qualify since these do not use the Data Entry Section.)

Both standard retrievals and query tree retrievals may be stored, but each may only be retrieved into their appropriate screens.

CAUTION: Sort constraints can not be stored.

STORE QUERY

The following steps should be followed:

1. After completing a retrieval, return to the Select Retrieval Screen.

2. Select the **Store Query Button**. (If the system does not recognize the query, it will pop-up a remark box.)

3. A **Store Query As…** window will appear. Select whether the query should track only the current TPFDD, or be generally accessible for all TPFDDs by clicking on the appropriate button; **do not press < RETURN >** .

4. Type in a short descriptive query name, and click on **OK**. **(Do not press < RETURN >)**. The query will be stored under that name. The window will disappear. (The name is not case-sensitive.)

RETRIEVE QUERY

The following steps should be followed:

1. Select the **Retrieve Query Button**.

2. A window will appear. Select either the **General** or **Current TPFDD Button**, depending on how the query was stored.

3. Press **< RETURN >** . A list of available queries will appear. Either scroll to the desired entry, or enter a search pattern for the desired entry.

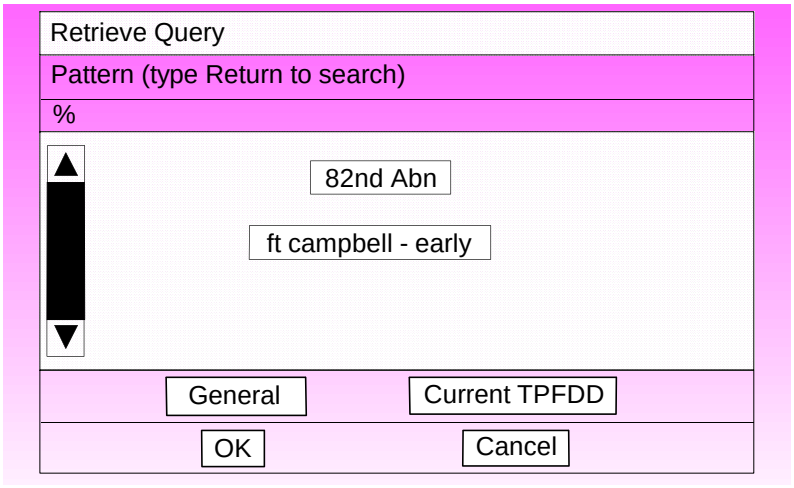


Figure 4-21: Query Retrieval

4. Select the desired entry, and click on **OK**. **(Do not press < RETURN >)**. The query will be entered into the Data Entry Section.

CAUTION: If unsure how a desired query was stored, check both **General** and **Current TPFDD** listings.

DELETE QUERY

Queries may be deleted, when they no longer have any utility, using the **Delete Query Button**.

COMMON PROBLEMS WITH STORING QUERIES

Ensure the retrieval applies to the appropriate current type of retrieval screen (Tree vs Standard retrieval).

Ensure the desired retrieval applies to the current TPFDD, or is applicable system-wide.

Watch out for superfluous press **< RETURN >** entries at the wrong places.

4.10.7 Constructing Logical Retrievals

The relationship among lines within a data entry area (A1 through An, for instance) is an **AND** relationship. This means that records must meet **all** specifications entered on all lines within that area to be included in the retrieval.

For example, the entry:

A1 - Requirements LIKE "U-%"

would retrieve All ULNs; while the two lines:

A1 - Requirements LIKE "U-%"
A2 - Service = "A"

would retrieve ONLY the Army ULNs.

The relationship between data entry areas (A, B, and C) is an **OR** relationship. The resulting collection will include records that meet the specifications in any one (or more) of the areas.

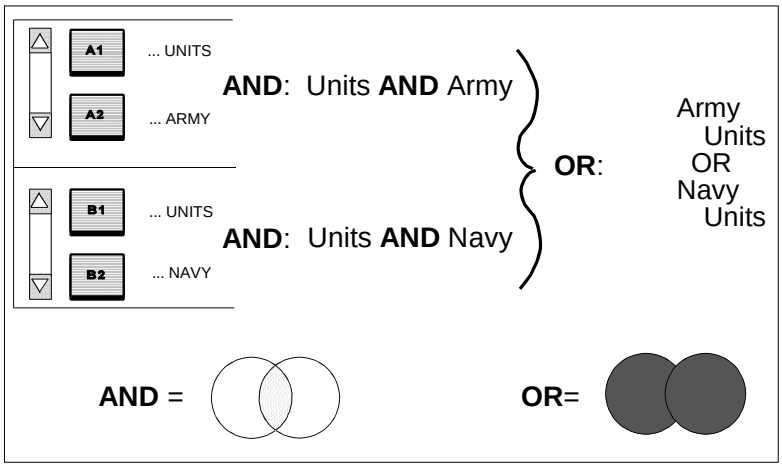


Figure 4-22: Logical Relationships

For example, the two sets of entries:

A1 - Requirements LIKE "U-%"
A2 - Service = "A"

B1 - Requirements LIKE "C-%"
B2 - Using Organization = "A"

would retrieve BOTH the sets of all Army ULNs, and all Army CINs.

4.10.8 Common Problems With Retrievals

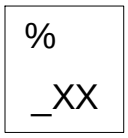
Be wary of hidden data entry lines. If a retrieval window shows, for example, only lines A2 and A3, there is a hidden A1 line which may contain some constraint. If a seemingly obvious retrieval does not perform as expected, check for a hidden data entry line that is modifying the overall effect.

Particularly when retrieving on text fields, expect data errors, spaces/blanks where there should not be any, and unusual spellings. Numbers in description fields often are preceded by zeros.

Double check for the correct dates and locations.

When retrieving some characteristic of cargo, check whether it is only applicable to ULNs, or to both ULNs and CINs; to one form of lift rather than all forms; and whether it applies to standard or non-standard ULNs. There are significant differences between cargo values retrieved using the Unit Attributes menu, and those using the Cargo Attributes menu.

4.10.9 Wildcards



Wildcard characters may be used to assist retrievals. Wildcards are special characters that substitute for one or more characters of the retrieval text. DART supports two wildcard characters:

% Which represents any number of characters, from none to all

_(underscore) Which represents a single character

These are actually Oracle/SQL wildcards. (The DOS counterparts to these characters are *****, which represents any number of characters, and **&**, which represents only one character.)

EXAMPLES

%ship would search for any character string with **ship** in the last four positions and any (or no) characters following. It would retrieve not only all "ship" entries, but "leadership", etc.

___ship would search for any character string with **ship** starting in the fourth position with any three characters preceding. It would retrieve "gunship", but not a stand alone "ship". The underscore character (_) can be useful when searching for a specific number of characters in a field.

_AP as an installation type code for a port will retrieve all records deploying through either a MAP, IAP, JAP, or CAP coded airfield.

%ST LOUIS% would find all instances of St Louis, anywhere in a text entry; this would be useful if the actual full name of the St Louis airport was uncertain.

The " = " retrieval operator REQUIRES AN EXACT MATCH to qualify a record. Since an exact match is not requested with a wildcard value, the "LIKE" operator MUST BE USED.

A wildcard search may not find missing or **NULL** fields. Use the **Missing/Not Missing** retrieval operators to locate these.

4.10.10 Query Tree Operation

The **Switch Interface Button** toggles between the standard retrieval screen and a more complex user interface called the Query Tree.

The Query Tree retrieval screen should be used only by the experienced DART user and only for logically complex retrievals which cannot be performed in the standard retrieval interface. The user should practice with this function before attempting to use it operationally.

Follow the instructions displayed on the mouse information line to build a retrieval in this screen.

Exit from the Tree Query screen by again clicking on the Switch Interface button (which toggles between the two screens).

The Store Query function will store queries from both the Tree Query and Standard Query screens, however stored queries can only be retrieved later for the appropriate current retrieval screen.

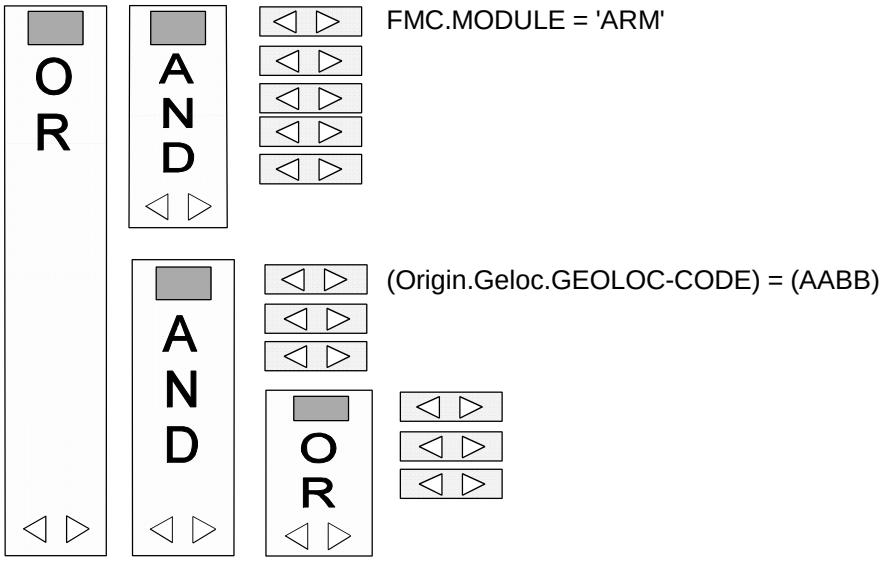


Figure 4-23: Tree Query Structure

CAUTION: This interface is still in the developmental stages and minor problems may be encountered.

4.11 ROUTINE RETRIEVALS

The Chart Display **Express Retrieval Menu Bar** option produces a pop-up menu of retrieval operations that may be performed on the TPFDD without accessing the full retrieval screen function. Among these options is **Routine Retrievals**. The Routine Retrievals option activates a pop-up menu of standard error checking retrievals which can be performed without the user having to create the retrieval from scratch.

These retrievals are similar to the edit checks in JOPES, and should be used to perform error checks and data edits in TPFDDs. These checks are separate from the **Conditions Checked** options provided under the Chart Display Options menu button.

Each routine retrieval must be selected, confirmed, and run individually. Each one selected will query the TPFDD just like a standard user-created query.

These standard retrievals are:

Service Code and UTC Incompatible

Service Code and ULN Incompatible

ULN and PIC Incompatible

UIC/Unit Name for Shortfall

In-Place Unit with Routing Data

FIC Invalid for Non-Standard UTC (99BB and Z99)

Invalid TPSN for Army Unit (based on a UIC-TPSN table loaded into DART, which may not be completely up-to-date)

TPFDD Personnel Not Equal TUCHA Personnel, FIC 0 or 2

TPFDD PAX Not Equal TUCHA PAX, FIC 0 or 2

TPFDD Cargo Not Equal Sum of SRF, FIC 2,8,9 (the sum of individual cargo figures is not within 1 percent plus/minus of totals)

All Dates Equal Zero (and PIC not A, P, X; and dest mode not = Z)

Dates are Missing (null field; and PIC not A, P, X; and dest mode not = Z)

Dates Out of Order

ILOC GEOLOC Code Matches other GEOLOC Code

POE Equals POD

POD Equals DEST But LAD Does Not Equal RDD

POD Equals DEST But LD CON/DIS CON (load constraint/discharge constraint) Not Equal N

POE or POD Missing

Transportation Mode or Source Invalid (invalid code pairs)

Non-Air Transportable Cargo with Air Mode (checks ULNs only)

Bulk POL Designated for MAC Move

Illogical Use of Intermediate Location

Number of PAX Exceeds Authorized Strength

Non-Unit Cargo Record with Personnel Data

Incomplete Split Shipment (-P/-C not matching)

Personnel Split Shipment with Cargo

Cargo Details Missing for FIC of 2, 8 or 9

Required Cargo Quantities Equal Zero (0 cargo for -C shipment)

Required Personnel Quantities Equal Zero (0 pax and 0 authpers with -P shipment).

If there is some doubt as to what is actually being checked for, the SQL used for any of these retrievals may be viewed after the query is performed. This is available through the **Display SQL** option.

COMMON PROBLEMS WITH ROUTINE RETRIEVALS

Routine retrievals do not include any special sort criteria. Resulting collections will be in normal ULN/CIN/PIN order.

Also, these retrievals are not always intuitive, may not function entirely as expected, and may find unusual data patterns. User caution is recommended. Verify by viewing the SQL, if in doubt.

Routine retrievals cannot be stored.

4.12 CARGO EDITING

The Cargo Editor function provides full viewing and editing of ULN cargo data to the fourth level of detail. Cargo editing is useful both for minor adjustments of existing data records and as part of the records create process.

Cargo Editing can be accessed through two means:

- The **CARGO Icon** on the TPFDD Editor Main Screen

- The **Cargo Categories Editor** option in the **ReqID Details Pop-up Menu**, Chart Display.

If the Cargo Editor is accessed from the **ReqID Details Pop-up** menu of a ULN, the Cargo Editor screen automatically positions the list with that ULN at the top of the screen. Otherwise, the Cargo Editor display is positioned at the start of the collection.

When either of these is selected, an Edit Cargo screen appears, displaying a list of all ULNs/CINs/PINs in the current collection. Only the ULNs can be edited.

STANDARD VS NON-STANDARD UNITS

A critical distinction that must be kept in mind, while editing unit cargo, is that of standard and non-standard unit cargo values.

- *Standard units* derive their cargo (and PAX) values from entries in the TUCHA standard reference file. The cargo and PAX values for these units CANNOT be edited.

- *Non-standard units* either have no values, or else have tailored values for this data. These units CAN be edited.

The FIC code indicates whether each ULN is standard or non-standard. If a standard unit is to be edited, its FIC must be changed first, to indicate non-standard. If, on the other hand, a non-standard unit is being returned to standard status, the FIC code changes to show it (and the cargo values change to those of the TUCHA file).

DART maintains a copy of the TUCHA file, as a source for standard unit values; and maintains a parallel set of tables for storing the non-standard unit values.

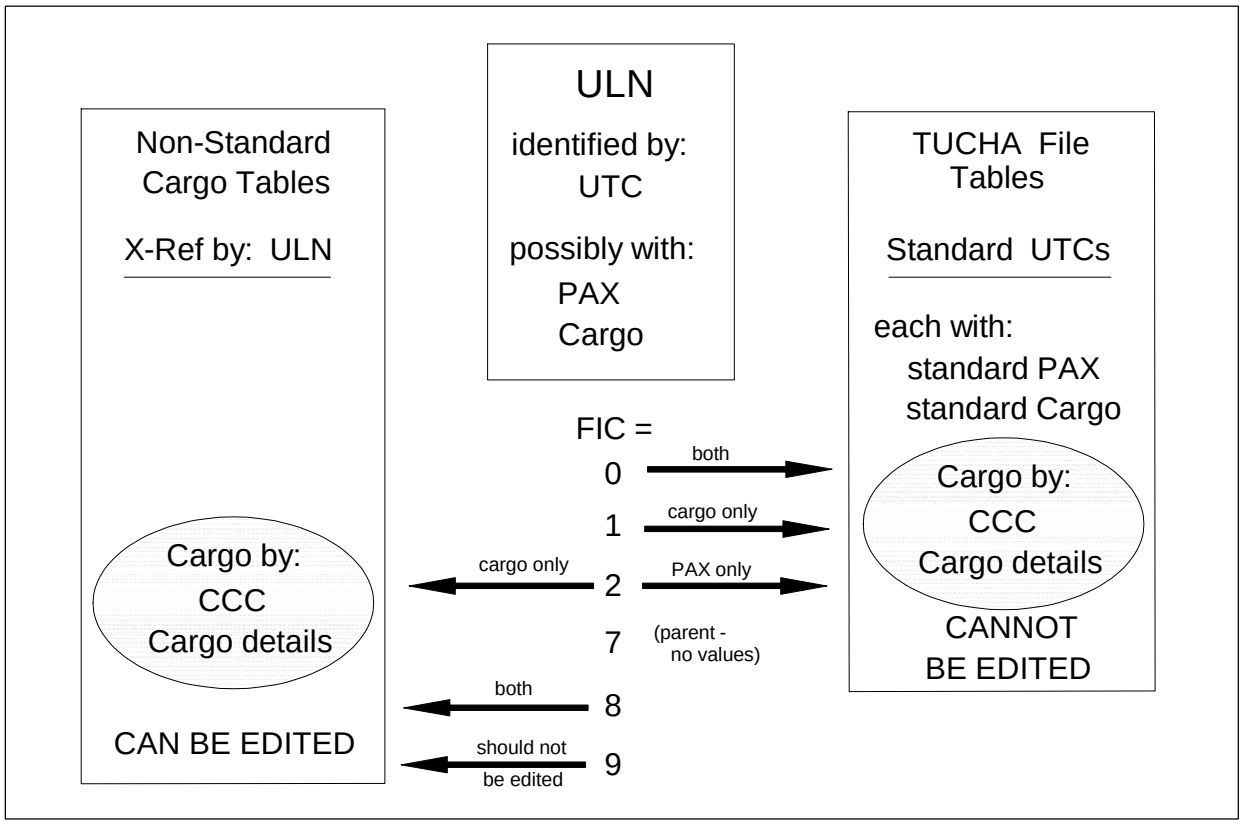


Figure 4-24: Standard and Non-Standard Units

4.12.1 Cargo Edit Screen

The entry level Cargo Edit screen lists all movement requirements in the current collection, by ReqID and sequence number (SeqNbr). The Cargo Editor Screen will be sorted in the same order as the main Editor Screen.

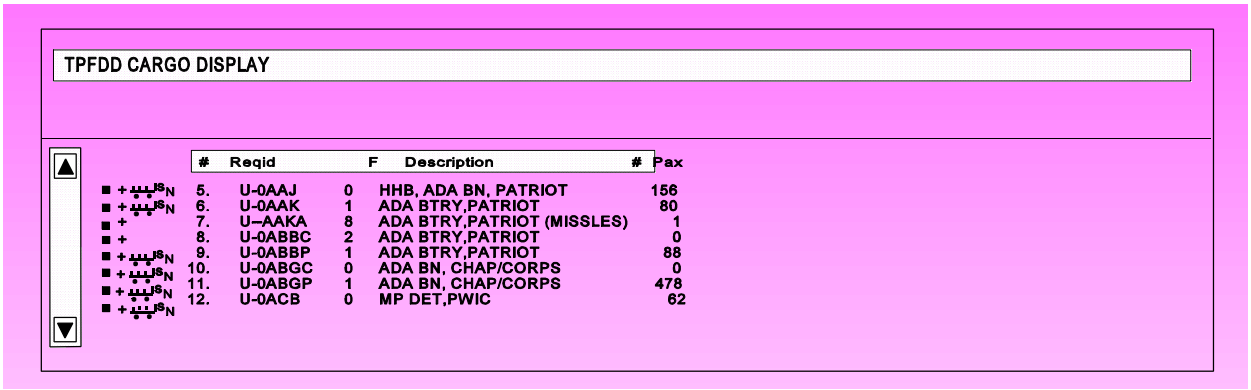


Figure 4-25: Top-Level Cargo Edit Screen

The SeqNbr applies only to the movement requirements in the current collection, and may be useful in cross-referencing between the Cargo Edit and the main Chart Display screens (as well as the miniature display chart).

A scroll bar is displayed along the left side. Whenever the scroll bar arrow is clicked the screen will scroll one ULN in that direction. The user may have to adjust or remove some entries in order to optimize the scroll bar operation. A ULN whose details extend beyond a full page may not fully display.

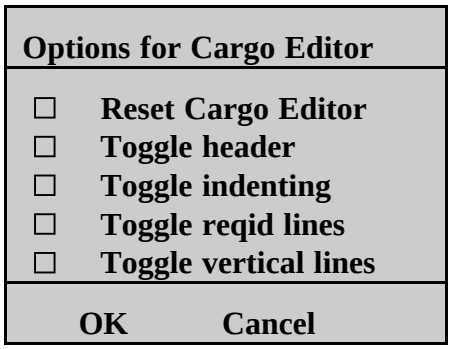
The ULN entries can, in some cases (where they contain cargo data) be expanded into sub-entries; and these can in some cases be expanded into two more levels of entries. Each level includes a set of symbols, and displays a set of data, some of which may be edited.

The column titles vary depending upon the level of detail being worked. To restore the titles for a higher level row, it may be necessary to close that row and reopen it.

For user convenience, all symbols are defined in the mouse information line when the mouse cursor is placed on them. If a symbol is clicked but nothing seems to happen, refer to the remarks which will often appear in the mouse information line.

OPTIONS BUTTON

The options button on the main menu bar has special options when operating in the cargo editor different from the options available in the TPFDD editor.



Click on the desired option button to effect the change as described below.

Reset Cargo Editor

Allows the user to reset the screen to the top level and collapses the lower level of detail lines. Useful as a quick "clean-up" when multiple lines of detail are displayed.

Toggle header

Toggles header banner at the top of the screen on and off. If the user is familiar with the fields, allows more room for detail lines on the screen.

Toggle indenting

Toggles indenting on and off. Left justifies the screen if desired.

Toggle reqid lines

Toggles horizontal dashed lines across the screen. May help the user with horizontal screen perspective.

Toggle vertical lines

Toggles vertical dashed lines on the screen. Particularly helpful in tracking field titles presented on the top banner down the screen.

TOP LEVEL DETAIL LINE

Following are the various symbols and data types, and their functions/definitions, displayed for each basic top-level ULN entry:

Small blue box — When selected, causes that line to scroll to the top of the screen. (The scroll bar along the left side of the screen should be used for overall display adjustment.)

\+ — Expands this entry to show the next level of detail; disappears if selected and there is no next level of detail.

< cart > — When selected, this symbol brings up a menu for creating new cargo category codes and equipment entries.

SN — Displayed for standard cargo ULNs, those with FIC = 0 or 1; when clicked, converts a standard ULN into a non-standard, by copying the basic standard data for this ULN/UTC into the non-standard cargo tables. When this ULN is changed into a non-standard, the "SN" disappears and the FIC changes to a 2 or 8.

Sequence number for all movement requirements. This indicates roughly where the current entries are in the overall list; and can be used to cross-reference to the collection in the main Editor Display Chart.

ReqID The ReqID of that movement requirement. When the mouse cursor is placed on it, the mouse information line displays:

ReqID - (SeqNbr - ReqID - Force Description - PAX - STON - MTON - SqFt -CBBLS)

If the left mouse button is clicked, a Details menu appears just as with the main editor. The right and center mouse buttons mark the record.

F Shows the FIC for this ULN. If FIC = 0 or 1, the cargo data reflects the (standard) TUCHA file data, and cannot be edited. If "SN" (see above) selected, the FIC changes to a 2 or 8, and cargo editing becomes possible. If FIC = 2, 8, or 9, the cargo data may be edited. If the FIC = 7, the ULN is a parent record which should have zero values; the cargo data should not be edited (but DART currently will permit it).

Description Force description; can be edited.

 # Pax Number of PAX; can be edited here.

NOTE: Once the Cargo Editor is expanded to lower levels of detail, it may not be possible to restore the top level detail line for the remainder of the session.

4.12.2 2nd Level Detail Line

When the plus sign + is clicked for a top-level entry, a second level of data appears under it. This line provides further descriptive information about the ULN. Only one second level line accompanies each top level line.

Following are the various symbols and data types, and their functions/definitions, displayed for the second level of entries:

- When selected, removes the current row (and all children -- lower row entries) from the screen; this "closes up the detail" for this movement requirement.

+ Expands this entry to show the next level of detail. The "+" disappears if it is selected but there is no next level of detail; the note 'There are no children of row' will appear in the mouse information line. Once the "+" symbol is selected, one of two new symbols will appear: